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MEMORANDUM COVERING THE TRAPPING OF HIBERNATING ELM LEAF BEETLES IN BUILDINGS

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MASSACHUSETTS ?
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Observations have shown that an extremely high percentage of adults of the elm leaf beetle hibernate in barn lofts, attics, chambers, sheds, church steeples etc. In New England it has been observed that heavily-infested elms are invariably near buildings.

Knowing this habit of the species it was thought feasible to attempt to trap the adults as they come out of hibernation in the spring as a control measure. In New England beetles become active in attics, lofts etc. about May 1 and fly or crawl toward the light. By placing traps in windows where light is admitted and darkening other openings by the use of black paper it has been found by experiments conducted in 1932 and 1933 that an enormous number of adults may be easily caught. Over 4,000 beetles were trapped in an attic in 1932 and over 20,000 in a barn loft in 1933. Considerable reduction in infestation resulted on a large elm with limbs near the attic. Unfortunately for the experiment the trees near the barn were sprayed, so the results of the experiment could not be definitely checked. It is, however, certain that the beetle population was materially reduced.

The trap consists simply of a wooden frame with tanglefooted cellophane stretched tightly across it. Measurements should be taken and frames made to fit windows where an abundance of light is admitted. The frame may be made of white pine ($1\frac{1}{2}$" x 7/8") and the cellophane (heavy grade) is held to the frame with lattice stock. Some care must be exercised in covering the cellophane with tanglefoot in order to get even distribution and to make the trap as transparent as possible. First a thin coating of tanglefoot is applied to the cellophane by use of a wooden paddle, care being taken not to have the tanglefoot nearer than 2 inches to the edge of the cellophane. One-half of the tanglefooted side is then folded on the other and it is then placed on some warm object in order to soften the tanglefoot. When the tanglefoot is soft place the cellophane on a flat surface and roll with a small roller until the tanglefoot is evenly distributed. The tanglefooted cellophane is then unfolded and put in the frame. The completed trap is then placed before the window and held with a few small nails. It is recommended that a strip of pasteboard about 1 foot wide and as long as the bottom of the window be placed on the sill or on the floor under the window to catch the few beetles which may become dislodged from the cellophane.

In New England the traps should be in place not later than May 1 and should be left until May 25 or until one feels certain that all adults have left hibernation quarters. During the time when traps are up, care should be taken to prevent the escape of beetles if the rooms must be used. Traps should be placed in all attics, barn lofts, unused chambers, out-buildings, church steeples etc. near the beetle infestation.

In small isolated communities it is believed that, by a concerted effort when the cooperation of everyone is obtained, considerable reduction of elm leaf beetle infestation and possibly good control may be obtained by trapping hibernating beetles.

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